

U.S. Patent Application of Miyamoto et al. – Serial No.: 09/866,954
Response to ex parte Quayle Action – Art Unit: 2634

IN THE ABSTRACT OF THE DISCLOSURE:

Applicants herewith attach a Substitute Abstract of the Disclosure and ask that it be substituted for the Abstract of the Disclosure originally submitted.

SUBSTITUTE ABSTRACT OF THE DISCLOSURE

A decision feedback equalizer provides two feedback routines for one piece of symbol-preceding decided data. The signal space is separated into decidable areas and uncertainty areas. Within each decidable area the distance between any point and the signal point is small. Within each uncertainty area the distance between any point and the signal point is large. If the symbol-preceding equalized signal is in a decidable area, the piece of decided data is fed back, as it is presumed to be correct. If the symbol-preceding equalized signal exists in an uncertainty area, the piece of decided data is not fed back, as it is presumed to be in error. Here the one piece data is selected from all the predicted symbol-preceding decided data so that the piece of instant equalized data is now in the decidable area. This piece of decided data is now fed back.